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hazard marker 10, 10A is in a sampling mode or has not yet determined the status of the area being marked. A clear, transparent thermoplastic cover 92 may be fitted into terminal end 23 of mast 18 by inserting into bore 29 or fitting over outer surface 28 and being secured in fluid tight engagement therewith or thereonto. For instance, thermoplastic cover 92 may have a threaded exterior portion for threading into a threaded end 5 of terminal end 23 or may have a reduced diameter end for friction fitting within bore 29 of mast 18 or may have an internal diameter equal to the outside diameter of outside surface 28 of mast 18 for gluing cover 92 thereonto. Means for marking 16 may be readily observed by personnel on foot or in vehicles as terminal end 23 is adapted to be disposed at least five feet above deployment surface 90. Optional separate lamp housing containing lighting lens 24 is a light weight two inch outside diameter, six inch long aluminum or 10 steel can having a closed end and an open end similar to housing 31 and is affixed to terminal end 23 of mast 18 or terminal end 23' of flag carrying tube 169 with another counterweight similar to counterweight 87, however this counterweight is not a significant mass as is counterweight 87 and thus the mass of separate lamp housing and separate counterweight does not significantly affect the righting moment provided by counterweight 87 and housing 31. The separate lamp housing [contains] contains separate light bulbs 32, 15 separate sensors 136, 154, 280 for environmental sampling and separate electronic circuit boards 91 all acting independently, these respective components contained in housing 31. Lighting lens 24 may be made a portion of the closed end of the separate lamp housing or may have lens apertures through the outer wall thereof for multiple hazard marker 10 or may be integral with mast 18A of multiple hazard marker 10A.

Upper end 19 has receiving antenna 25 and transmitting antenna 26 associated therewith, receiving antenna 25 electrically isolated from transmitting antenna 26 by insulating sleeve 27. Receiving antenna 25 is an aluminum or steel tube identical to the tube used for mast 18 and, in fact, comprises upper end 19 of mast 18 while transmitting antenna 26 is a mid portion 146 of mast 18. Insulating sleeve 27 is formed from a thermoplastic material such as polyethylene, polypropylene or nylon and is greater in outside diameter than mast 18 and has a bore equal to outside diameter 78 such that receiving antenna 25 and transmitting 25 antenna 26 are received therein. Insulating sleeve 27 has an internal ring separating receiving antenna 25 and transmitting antenna 26. Receiving antenna 25 and transmitting antenna 26 are electrically connected to receiving and transmitting portions of integrated circuit boards 91 respectively by wires which are run downwardly through bore 29 of mast 18. Multiple hazard marker 10, 10A contains a command signal impulse actuator 93 associated with integrated circuit boards 91 that is capable of receiving signal, code and 30 frequency to the multiple hazard marker 10, 10A in the cartridge 120 to change the color of electronic light 32 to indicate hazardous material with a yellow light, to red for warning, to green for safe. Multiple hazard

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marker 10, 10A has a battery that provides power to the command signal impulse actuator 93, an integrated current receiver command module 94, light bulbs 32 and circuit boards 91. Command signal impulse actuator 93 and integrated current receiver command module 94 therefore, comprise a means for changing 86 to receive instructions from a remote unit 265 or act in response to a detected hazard to modify means for 5 signaling 36 accordingly.

Referring particularly now to Fig. 4b, lower end 20 of mast 18 has counterweight 87 threaded thereonto and may also have an instrument housing 31 affixed to counterweight 87. Counterweight 87 provides a righting moment to elongated mast 18 such that mast 18 is always substantially vertical after multiple hazard marker 10, 10A is fully deployed upon deployment surface 90. Housing 31 is a hollow metal 10 container having a lower end 147 and an upper end 148, upper end 148 having threads thereon for threading upon a threaded flange 151 of counterweight 87. Counterweight 87 is a die cast metal, three kilogram weight having a threaded bore 89 centrally disposed therein which is affixed to lower end 20 of mast 18 by threading ~~onto~~ counterweight 87 upon a threaded portion 88 of lower end 20. Counterweight 87 further has a threaded flange 151 at its outer periphery for accepting housing 31 thereupon. The significant 15 mass of counterweight 87 provides the righting moment for mast 18. Counterweight 87 has slots formed upon the lower surface 153 thereof for mounting the components of means for signaling 36, such as electronic transmitters, ~~circuitry~~, power supplies, sensing elements 136, 154, 280, light bulbs 32, receivers 137 and transmitters, threaded bore 89 aligning with bore 29 of mast 18 for passing wiring or sensing tubing therethrough. A battery generally supplies power to command signal impulse actuator 93, integrated current receiver command module 94, light bulbs 32 and integrated circuit boards 91, however, counterweight 87 or housing 31 may additionally have a solar array mounted thereon for generating 20 electrical power.

Referring now to Fig. 4a, gimbal 51 is a preferably a brass, bronze or thermoplastic spherical bearing in a bearing assembly approximately one and one half inches in outside diameter having a one half inch hole 25 bored therethrough for receiving mast 18 therein. Support plate 38 has mounting hole 76 bored centrally therein for receiving gimbal 51. Mast 18 is thus pivotally supported in gimbal 51 mounted in support plate 38 and base mounting plate 50 on centerline 53 of multiple hazard marker 10, central portion 13 joining upper portion 17 to surface engaging portion 15. Gimbal 51 therefore, has a hole 75 substantially the same diameter as outer diameter 78 of mast 18 through its geographic center for receiving mast 18 therethrough 30 and has mast 18 firmly affixed therein. Typically, gimbal 51 is a spherical bearing and may be expanded by heating, or mast 18 may be supercooled, prior to sliding mast 18 therein. Thus, hole 75 is expanded along